

IN THE CLAIMS:

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
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11. (Canceled)
12. (Canceled)
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16. (Canceled)
17. (Canceled)
18. (Canceled)
19. (Canceled)
20. (Canceled)
21. (Canceled)
22. (Canceled)
23. (Canceled)
24. (Canceled)
25. (Canceled)
26. (Canceled)
27. (Canceled)
28. (Canceled)
29. (Canceled)

30. (Previously Presented) A method of detecting the presence or absence of *A. actinomycetemcomitans* or an *A. actinomycetemcomitans* antigen in a test sample comprising:

contacting a test sample with an antibody or a fragment thereof that specifically binds to a purified immunogenic polypeptide consisting of SEQ ID NO:52, wherein the antibody or fragment thereof specifically binds *A. actinomycetemcomitans* or an *A. actinomycetemcomitans* antigen under conditions that allow formation of an

immunocomplex between the antibody and the *A. actinomycetemcomitans* or the *A. actinomycetemcomitans* antigen; and

detecting an immunocomplex,

wherein detection of the immunocomplex indicates the presence of *A. actinomycetemcomitans* or an *A. actinomycetemcomitans* antigen in the test sample.

31. (Previously Presented) The method of claim 30, wherein the *A. actinomycetemcomitans* antigen is expressed *in vivo* during infection of an animal.

32. (Canceled)

33. (Canceled)

34. (Canceled)

35. (Canceled)

36. (Canceled)

37. (Canceled)

38. (Canceled)

39. (Canceled)

40. (Previously Presented) A method of detecting presence or absence of an *A. actinomycetemcomitans* antibody in a test sample comprising:

contacting a test sample with a purified immunogenic polypeptide consisting of SEQ ID NO:52, wherein the polypeptide specifically binds an *A. actinomycetemcomitans* antibody under conditions that allow formation of an immunocomplex between the antibody and the polypeptide; and

detecting an immunocomplex,

wherein detection of the immunocomplex indicates the presence of *A. actinomycetemcomitans* antibody in the test sample.

41. (Canceled)